



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,797	01/30/2004	John T. Braun	4002-3068/PC798.00	7113

7590 01/27/2006

Woodard, Emhardt, Moriarty, McNett & Henry LLP
Bank One Center/Tower
Suite 3700
111 Monument Circle
Indianapolis, IN 46204-5137

EXAMINER

AMARELD JR, ROBERT W

ART UNIT	PAPER NUMBER
----------	--------------

3738

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/768,797

Applicant(s)

BRAUN ET AL.

Examiner

Robert W. Amareld, Jr.

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,10-12,16,17,22-26,30,33,39-44,49-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8,9,13-15,18-20,27-29,35-38 and 45-48 is/are rejected.
- 7) ☒ Claim(s) 21,31,32 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/30/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Invention I, Species A, claims 1-5, 8-9, 13-15, 18-21, 27-29, 31-32, 34-38 & 45-48 in the reply filed on 12/21/05 is acknowledged. Claims 6, 7, 10-12, 16, 17, 22-26, 30, 33, 39-44, 49-80 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/27/05.

Claim Objections

Claim 2 is objected to because of the following informalities: The first line of the claim references "said" with no structure following "said" It is assumed that the applicant meant to write "said body" and will be examined as such. Appropriate correction is required.

Allowable Subject Matter

Claims 21, 31, 32 & 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-9, 13, 14, 18, 27-29, 37, 45-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Nicola (US Pat# 2580821). Nicola discloses a body (Fig 2) with first and second ends (1) that are formable between a first and second condition (column 2, lines 30-35) by compressing (means) the body between the ends and is made of a shape memory material, the shape memory material being a resilient spring (4, column 2, line 34) where the body includes a first and second hole at each end (2) and the spring portion enabling the reforming of the device to an initial condition. The stiffness of the body varies along the length of the body, which is demonstrated by the thin portions (4) and thicker portions (1,3), it is clear that a thicker portion will have a stiffness different than the thin portion, the thick portions and thin portions being at different points along the length, therefore demonstrating a varying stiffness along the length where the mid portion (3) will have an increased stiffness over the thin portions (4) demonstrating an increased stiffness toward the median of the body. The device includes a lower surface and an upper surface, with an enlarged middle portion (3) being between the upper and lower surfaces. The device configuration may be varied as required by the shapes of the boned on which it is used, such as for two vertebrae of the spinal column. The device includes anchors (6), being screws, and is formable by a phase change such as melting by increasing the temperature as it is made of metal and

Art Unit: 3738

metal is inherently formable in this manner. Please note the intended use, as set forth in the claims, carries no weight in the absence of any distinguishing structure.

Claims 1-5, 8-9, 13, 27, 37-38, 45-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Mai (US Pat# 5246443). Mai discloses a body (Fig 3 & 4) with first and second ends (4, 5) that are formable between a first and second condition (column 5, lines 30-38) by austenitic and/or martensitic phase transformation (means) of the body between the ends and is made of a shape memory material, the shape memory material being a thermoelastic martensitic alloy (column 2, lines 5-7) where the body includes a first and second hole at each end (9 & 10) with the martensitic material is resilient and enabling the reforming of the device to an initial condition, where the device is further fully capable of formation by compression between its ends. The stiffness of the body varies along the length of the body, which is demonstrated by the thin portions (6) and thicker portions (4 & 5), it is clear that a thicker portion will have a stiffness different than the thin portion, the thick portions and thin portions being at different points along the length, therefore demonstrating a varying stiffness along the length. The device includes a lower surface and an upper surface and is disclosed for use with anchors such as screws (column 5, lines 30-35). Please note the intended use, as set forth in the claims, carries no weight in the absence of any distinguishing structure.

Art Unit: 3738

Claims 1-5, 8-9, 13, 19, 20, 27, 28, 35 & 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Jobe (US Pat# 5785713). Jobe discloses a body (Fig 7) with first and second ends that are formable between a first and second condition (Figure 7 & 8) by compressing (means) the body between the ends and is made of a shape memory material, the shape memory material being a resilient and deforming (column 3, lines 63-67) where the body includes a first and second hole at each end for each anchor post (14) and the resilient material enabling the reforming of the device to an initial condition. The stiffness of the body varies along the length of the body, which is demonstrated by the varying thickness of the plate member (12, figure 7), it is clear that a thicker portion will have a stiffness different than the thin portion. The embodiment of Figure 3, having a longitudinal axis in the direction of the fracture (8), has an alternate medial axis that can be envisioned as cutting through the center of post (14a), each side of the axis having a generally triangular shape and including an anchor hole for the pegs (14b, 14c), opposite one another, with the base of each triangular shape being adjacent each other. Please note the intended use, as set forth in the claims, carries no weight in the absence of any distinguishing structure.

Claims 1, 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Judet (US Pat# 4263904). Judet discloses a body (1) with first and second ends (6, 7) and upper and lower surfaces. The device also includes an enlarged middle portion (4) between the upper and lower surfaces that is a conical pyramidal shape.

Conclusion

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bosma, US Pat# 6241746 – vascular filter; Diez, US Pat# 5681313 – bone device; Boyle, US Pub# 2002/0026242 – ramp shaped implant; Heggeness, US Pub# 2004/0172040 – bone compression; Ritland, US Pub# 2004/0002708- fixation device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Amareld, Jr. whose telephone number is 571-272-6170. The examiner can normally be reached on M-F 9am -5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine M. McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RWA


CORRINE McDERMOTT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

Robert W Amareld, Jr.
Examiner
Art Unit 3738

